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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/656,522	09/07/2000	George Gerpheide	0672.CIRQ.NP	9011

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EXAMINER

NGUYEN, JENNIFER T

ART UNIT	PAPER NUMBER
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2674

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DATE MAILED: 05/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/656,522

Applicant(s)

GERPHEIDE ET AL.

Examiner

Jennifer T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/13/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is responsive for amendment filed on 12/13/2003.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 8-10, 12-14, 17-24, 26-28 and 31-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al. (U.S. Patent No. 6,429,846) in view of Heikkinen et al. (U.S. Patent No. 6,073,036) and further in view of Fernando et al. (U.S. Patent No. 6,193,152).

Regarding claims 8, 22 and 36, referring to Figs. 1-3, Rosenberg teaches a touchpad keyboard (16) for entering data into a handheld and portable electronic appliance (10), said touchpad keyboard (16) comprising: a touchpad (16) including circuitry for detecting and localizing a pointing object on a surface thereof; a housing (40) that surrounds all of the circuitry of the touchpad (16), while leaving a surface thereof exposed; a communications port (not shown) for direct coupling to the hand-held portable electronic appliance (10) that enables transmission thereto of signals corresponding to the plurality of keys touched on the touchpad keyboard (16) (col. 3, lines 30-62, col. 5, lines 332-35).

Rosenberg differs from claims 8, 22 and 36 in that he does not specifically teach an overlay disposed on the surface of the touchpad keyboard that defines a plurality of keys, wherein the overlay provides visual feedback that corresponds to signals that will be generated therefrom when the plurality of keys of the touchpad keyboard are touched and an audio

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feedback system that causes a pre-recorded sound to be made audible whenever any key of the plurality of keys is touched on the touchpad keyboard. However, referring to Fig. 1B, Heikkinen teaches an overlay disposed on the surface of the touchpad keyboard (23) that defines a plurality of keys, wherein the overlay provides visual feedback that corresponds to signals that will be generated therefrom when the plurality of keys of the touchpad keyboard are touched (col. 9, line 64 to col. 10, line 5) and referring to Fig. 3, Fernando teaches an audio feedback system (185) that causes a pre-recorded sound to be made audible whenever any key of the plurality of keys is touched on the touchpad keyboard (50) (col. 6, line 63 to col. 7, line 5, col. 11, lines 36-44). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the visual feedback as taught by Heikkinen and the audio feedback as taught by Fernando in the system of Rosenberg in order to provide user a more convenient service.

Regarding claims 9 and 23, the combination of Rosenberg, Heikkinen and Fernando teaches the pre-recorded sound of the audio feedback system (185) includes a pre-recorded voice that states a name of an associated key of the plurality of keys that has been touched (col. 6, line 63 to col. 7, line 5, col. 11, lines 36-44 of Fernando).

Regarding claims 10 and 24, the combination of Rosenberg, Heikkinen and Fernando differs from claims 10 and 24 in that it does not specifically teach a mechanical scrolling wheel disposed in a side of touchpad, such that a user can rotate the mechanical wheel to thereby cause data on a display screen to scroll up or down. However, it would have been obvious to obtain a mechanical scrolling wheel disposed in a side of touchpad, such that a user can rotate

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the mechanical wheel to thereby cause data on a display screen to scroll up or down in order to provide a touchpad of requiring minimal amount of force to be activated.

Regarding claims 12 and 26, Rosenberg further teaches a communications cable that is coupled to the communications port to thereby enable remote coupling to a portable electronic appliance (col. 5, lines 32-36).

Regarding claims 13 and 27, referring to Figs. 8A and 8B, Rosenberg further teaches the hand-held and portable electronic appliance is personal digital assistants (PDAs) (col. 15, lines 45-59).

Regarding claims 14 and 28, Rosenberg further teaches the communications port is wire, wireless (col. 5, lines 32-36).

Regarding claims 17 and 31, Rosenberg further teaches the touchpad (16) is finger or stylus responsive devices (col. 3, line 64 to col. 4, line 5).

Regarding claims 18 and 32, Rosenberg further teaches the plurality of keys include at least a first dedicated key that facilitates navigation in web pages (col. 7, lines 12-20).

Regarding claims 19 and 33, Rosenberg further teaches at least a second dedicated key that is programmable to actuate a computer program (col. 6, lines 7-23).

Regarding claims 20 and 34, Rosenberg further teaches inherently a mode switch that enables the touchpad keyboard (16) to switch between functioning as a touchpad keyboard and as a cursor control device (col. 4, lines 1-5, lines 43-64).

Regarding claims 21 and 35, Rosenberg further teaches a second touchpad that is dedicated to web page navigation (col. 13, lines 41-54, col. 14, lines 54-65).

Regarding claim 37, the combination of Rosenberg, Heikkinen and Fernando teaches

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a microphone (19) for recording audio data for transmission via the network, and for live transmission of audio data for transmission via the network (col. 4, lines 3-18 Of Heikkinen).

4. Claims 11 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al. (U.S. Patent No. 6,429,846) and Heikkinen et al. (U.S. Patent No. 6,073,036) in view of Fernando et al. (U.S. Patent No. 6,193,152) and further in view of Martinelli et al. (U.S. Patent No. 6,239,790).

Regarding claims 11 and 25, the combination of Rosenberg, Heikkinen and Fernando differs from claims 10 and 24 in that it does not specifically teach an enrolling zone disposed in the housing, such that a user slides a pointing object along the touchpad scrolling zone to thereby cause data on a display screen to ,scroll up or down, corresponding to a direction of movement of the pointing object. However, referring to Fig. 2, Martinelli teaches an enrolling zone (30) disposed in the housing (12), such that a user slides a pointing object along the touchpad scrolling zone (30) to thereby cause data on a display screen to scroll up or down, corresponding to a direction of movement of the pointing object (col. 8, lines 34-49). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the enrolling zone as taught by Martinelli in the system of the combination of Rosenberg, Heikkinen and Fernando in order to provide a touchpad of requiring minimal amount of force to be activated.

5. Claims 15, 16, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al. (U.S. Patent No. 6,429,846) and Heikkinen et al. (U.S. Patent No. 6,073,036) in view of Fernando et al. (U.S. Patent No. 6,193,152) and further in view of Holehan (U.S. Patent No. 5,988,902).

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Regarding claims 15, 16, 29 and 30, the combination of Rosenberg, Heikkinen and Fernando differs from claims 15, 16, 29 and 30 in that it does not specifically teach the overlay further comprises a plurality of raised ridges, wherein the plurality of raised ridges define a plurality of zones, wherein the plurality of zones corresponds to the plurality of keys of the touchpad keyboard. However, referring to Fig. 5, Holehan teaches the overlay (120) further comprises a plurality of raised ridges, wherein the plurality of raised ridges (122) define a plurality of zones, wherein the plurality of zones corresponds to the plurality of keys of the touchpad keyboard (col. 5, line 45 to col. 6, line 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the overlay further comprises a plurality of raised ridges, wherein the plurality of raised ridges define a plurality of zones, wherein the plurality of zones corresponds to the plurality of keys of the touchpad keyboard as taught by Holehan in the system of the combination of Rosenberg, Heikkinen and Fernando in order to increase input control capability without increasing the size, weight, and number of peripheral computer control devices.

6. Applicant's arguments with respect to claims 8-37 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jennifer T. Nguyen** whose telephone Number is **703-305-3225**. The examiner can normally be reached on Mon-Fri from 9:00-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reach at **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC. 20231

Or faxed to: 703-872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, sixth-floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or Proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703-306-0377.

Jennifer T. Nguyen
Art Unit 2674
Patent Examiner

A handwritten signature in black ink, appearing to read 'Richard Hjerpe', with a stylized, cursive script.

**RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**